

Claims

1. A gas generator (10) comprising
a housing (20) and a propellant contained in the housing,
5 the propellant, after activation, releasing a fluid which is under pressure,
and the housing (20) having a first (22) and a second housing part (24), which are
movable relative to each other under pressure and form an overflow opening (46)
with a variable flow area depending on the pressure in the housing,
characterized in that either the first (22) or the second housing part (24), or both,
10 have spacing means (44, 48, 50), the spacing means (44, 48, 50) being designed
so that in the case of the relative movement of the housing parts (22, 24) with
respect to each other, a minimum value of the variable flow area is maintained.
2. The gas generator according to claim 1, characterized in that the overflow
opening (46) is completely closed before activation of the propellant, and is
15 opened after activation of the propellant, with substantially the entire fluid
flowing through the overflow opening (46).
3. The gas generator according to claim 1, characterized in that the first (22)
and the second housing part (24) are constructed so as to be substantially radially
symmetrical.
- 20 4. The gas generator according to claim 1, characterized in that the first (22)
and the second housing part (24), after activation of the propellant, form a
substantially ring-shaped overflow opening (46).
5. The gas generator according to claim 1, characterized in that the overflow
opening (46) has several opening sections (46a) separated from each other.

6. The gas generator according to claim 1, characterized in that the spacing means (44, 48, 50) are constructed as beads (44).

7. The gas generator according to claim 1, characterized in that the spacing means (44, 48, 50) are grooves (48).

5 8. The gas generator according to claim 1, characterized in that the spacing means (44, 48, 50) are ribs formed on the first (22) or the second (24) housing part.

9. The gas generator according to claim 1, characterized in that the first (22) and the second housing part (24) form a common first contact region (38) before
10 activation of the propellant, the common first contact region (38) being secured with an adhesive connection, and that the first (22) and the second housing part (24), after activation of the propellant, form several common second contact regions (38').

10. The gas generator according to claim 1, characterized in that the first
15 housing part (22) has a cover section (28) and a wall section (30) and the spacing means (44, 48, 50) are arranged in the transition region between the cover section and the wall section.

11. The gas generator according to claim 1, characterized in that the second housing part (24) defines a combustion chamber (18).

20 12. The gas generator according to claim 1, characterized in that the spacing means (44, 48, 50) are arranged on an end section (36) of the second housing part (24).

13. A gas generator (10) comprising

a housing (20) and propellant contained in the housing,

25 wherein the propellant, after activation, releases a fluid which is under pressure,

and wherein the housing (20) has a first (22) and a second housing part (24), which are moveable relative to each other under pressure and form an overflow opening with a variable flow area depending on said pressure in said housing,

characterized in that between the first (22) and the second housing part (24),
5 spacing means (52, 56, 60) are arranged, the spacing means (52, 56, 60) being separate from the first (22) and second housing part (24) and designed so that in the case of said relative movement of said first and second housing parts (22, 24) with respect to each other, a minimum value of the variable flow area is maintained.

10 14. The gas generator according to Claim 13, characterized in that the overflow opening is completely closed before activation of the propellant and is opened after activation of the propellant, substantially the entire fluid stream flowing through the overflow opening.

15 15. The gas generator according to Claim 13, characterized in that the first (22) and the second housing part (24) and also the spacing means (52, 56, 60) are constructed so as to be substantially radially symmetrical.

20 16. The gas generator according to Claim 13, characterized in that the first (22) and the second housing part (24) and also the spacing means (52, 56, 60) after activation of the propellant form a substantially ring-shaped overflow opening.

17. The gas generator according to Claim 13, characterized in that the overflow opening has several opening sections separate from each other.

18. The gas generator according to Claim 13, characterized in that the spacing means (52, 56, 60) have an L-shaped cross-sectional profile.

25 19. The gas generator according to Claim 13, characterized in that the spacing means (52, 56, 60) have a cross-sectional profile in the form of a semi-circular ring.

20. The gas generator according to Claim 13, characterized in that the housing (20) has a third housing part (26) and the spacing means (52, 56, 60) rest on the third housing part (26).

5 21. The gas generator according to Claim 13, characterized in that the first (22) and the second housing part (24), before activation of the propellant, form a common contact region (38), the common contact region (38) being secured with an adhesive connection, and that the first (22) and the second housing part (24), after activation of the propellant, do not form a common contact region.